quantity, paſſes in the wire inviſibly: but in paſſing along a chain, it becomes viſible as it leaps from link to link. In paſſing along leaf-gilding 'tis viſible: for the leaf-gold is full of pores; hold a leaf to the light and it appears like a net; and the fire is ſeen in its leaping over the vacancies.—And as when a long canal filled with ſtill water is opened at one end, in order to be diſcharged, the motion of the water begins firſt near the opened end, and proceeds towards the cloſe end, tho' the water itſelf moves from the cloſe towards the opened end: ſo the electrical fire diſcharged into the polar regions, perhaps from a thouſand leagues length of vaporiz'd air, appears firſt where 'tis firſt in motion, *i. e.* in the moſt northern part, and the appearance proceeds ſouthward, tho' the fire really moves northward. This is ſuppoſed to account for the *Aurora Borealis*.

41. When there is great heat on the land, in a particular region (the ſun having ſhone on it perhaps ſeveral days, while the ſurrounding countries have been ſcreen'd by clouds) the lower air is rarified and riſes, the cooler denſer air above deſcends; the clouds in that air meet from all ſides, and join over the heated place; and if ſome are electrified, others not, lightning and thunder ſucceed, and ſhowers fall. Hence thunder-guſts after heats, and cool air after guſts; the water and the clouds that bring it, coming from a higher and therefore a cooler region.

42. An electrical ſpark, drawn from an irregular body at ſome diſtance is ſcarce ever ſtrait, but ſhows crooked and waving in the air. So do the flaſhes of lightning; the clouds being very irregular bodies.

43. As electrified clouds paſs over a country, high hills and high trees, lofty towers, ſpires, maſts of ſhips, chimneys, *&c.* as ſo many prominencies and points, draw the electrical fire, and the whole cloud diſcharges there.

44. Dangerous, therefore, is it to take ſhelter under a tree during a thunder-guſt. It has been fatal to many, both men and beaſts.

45. It is ſafer to be in the open field for another reaſon. When the clothes are wet, if a flaſh in its way to the ground ſhould ſtrike your head, it will run in the water over the ſurface of your body; whereas, if your clothes were dry, it would go thro' the body.

Hence a wet rat cannot be killed by the exploding electrical bottle, when a dry rat may.

46. Common fire is in all bodies, more or leſs, as well as electrical fire. Perhaps they may be different modifications of the ſame element; or they may be different elements. The latter is by ſome ſuſpected.

47. If they are different things, yet they may and do ſubſiſt together in the ſame body.

48. When electrical fire ſtrikes thro' a body, it acts upon the common fire contained in it, and puts that fire in motion; and if there be a ſufficient quantity of each kind of fire, the body will be inflamed.

49. When the quantity of common fire in the body is ſmall, the quantity of the electrical fire (or the electrical ſtroke)

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